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EXAMINER	
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/750,072	HSIUNG ET AL.	
	Examiner	Art Unit	
	Edna Wong	1753	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *11 June 2007*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) *6-8* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-5* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☒ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 December 2003* is/are: a)☐ accepted or b)☒ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *December 31, 2003*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Election/Restrictions

Applicant's election of Group **I**, claims **1-5**, in the reply filed on June 11, 2007 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

The requirement is still deemed proper and is therefore made FINAL.

Accordingly, claims **6-8** are withdrawn from consideration as being directed to a non-elected invention.

Drawings

The drawings are objected to because:

In Fig. 1(a), there are two steps designated as "6".

In Fig. 1(a), step 6 (second occurrence), the word "immerging" should be amended to the word -- immersing --.

In Fig. 1(b), step 65, the word "immerging" should be amended to the word -- immersing --.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended

replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

I. Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure

describes," etc.

The abstract of the disclosure is objected to because:

The abstract exceeds 150 words in length.

In line 17, the word "Sensing" should be amended to the word -- sensing --.

Correction is required. See MPEP § 608.01(b).

II. The disclosure is objected to because of the following informalities:

page 10, line 8, the word "touting" should be amended to the word -- routing --.

page 14, line 3, the word "immerging" should be amended to the word -- immersing --.

page 14, line 9, the word "immerging" should be amended to the word -- immersing --.

page 15, line 3, the word "immerges" should be amended to the word -- immerses --.

page 15, line 22, the word "immerging" should be amended to the word -- immersing --.

page 17, line 8, the word "Sensing" should be amended to the word -- sensing --.

page 17, line 11, the word "Sensing" should be amended to the word -- sensing --

page 17, line 22, the word "Sensing" should be amended to the word -- sensing --

page 19, line 4, the word "Sensing" should be amended to the word -- sensing --.

Appropriate correction is required.

The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

Claims **1 and 2** are objected to because of the following informalities:

Claim 1

line 3, the word -- the -- should be inserted after the word "comprising".

line 10, the word "a" should be amended to the word -- an --.

Claim 2

line 4, the word -- the -- should be inserted after the word "comprises".

line 13, the word "immerging" should be amended to the word -- immersing --.

line 19, the word "immerging" should be amended to the word -- immersing --.

Appropriate correction is required.

Claim Rejections - 35 USC § 112

Claims **1-5** are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1

lines 5-6, "the solid-state sensing material" lacks antecedent basis.

line 6, "the sensing environment" lacks antecedent basis.

line 7, it appears that "a solid-state sensing material" is the same as the solid-state sensing material recited in claim 1, lines 5-6. However, it is unclear if it is.

If it is, then it is suggested that the word "a" be amended to the word -- the--.

If it is not, then what is the relationship between the solid-state sensing materials?

line 9, it is unclear how *the device* can be routed in step 3, when the device is not made until step 5.

line 11, "the sensing window area" lacks antecedent basis.

line 12, it is unclear how *the device* can be immersed into an electro-polymerizing solution in step 5, when the device is not made until after polypyrrole is elector-polymerized.

lines 13-14, recites "electro-polymerizing polypyrrole". Polypyrrole is already a polymer. How it is electro-polymerized? Shouldn't the pyrrole monomer be electro-polymerized instead?

Claim 2

line 6, "said finished conductive substrate" lacks antecedent basis.

lines 9-10, a "step C" is missing.

lines 10-11, "the positive electrode" lacks antecedent basis.

line 11, "the power supply" lacks antecedent basis.

line 12, "the negative electrode" lacks antecedent basis.

line 17, "can be polymerized" is indefinite. Is it or is it not?

line 19, "the polypyrrole sensor" lacks antecedent basis. See also claim 2, line 20.

lines 19-20, "the deionized water" lacks antecedent basis.

line 22, "the fabrication of the polypyrrole sensor" lacks antecedent basis.

Claim 3

lines 3-4, "the solid-state substrate" lacks antecedent basis.

lines 3-4, it appears that "the solid-state substrate" is the same as the appropriate substrate recited in claim 1, line 5. However, it is unclear if it is. If it is not, then what is the relationship between the solid-state substrate and the appropriate substrate?

line 6, the alternative expression of the Markush group is improper. MPEP § 2173.05(h). The word "or" should be amended to the word -- and --.

Claim 4

line 5, the alternative expression of the Markush group is improper. MPEP § 2173.05(h). The word "or" should be amended to the word -- and --.

Claim 5

lines 3-4, recites "said electro-polymerizing solution of the polypyrrole". Shouldn't the electro-polymerizing solution be of *pyrrole* instead?

line 5, recites "polypyrrole". Shouldn't the electro-polymerizing solution comprise *pyrrole*?

lines 5-7, the phrase "such as the electro-polymerizing solution comprising a phosphate solution, potassium chloride, and polypyrrole" is indefinite.

lines 5-7, "the electro-polymerizing solution comprising a phosphate solution, potassium chloride, and polypyrrole" lacks antecedent basis.

line 7, recites "polypyrrole". Shouldn't the electro-polymerizing solution comprise

pyrrole instead?

line 9, "said polypyrrole sensor" lacks antecedent basis.

line 10, "can be achieved" is indefinite. Is it or is it not?

line 10, "this technology" is indefinite.

lines 10-11, "can be applied" is indefinite. Is it or is it not?

line 11, "the corresponding sensing electrode" lacks antecedent basis.

line 14, "the differential pair pH sensing device" lacks antecedent basis.

line 14, "can be obtained" is indefinite. Is it or is it not?

Claim Rejections - 35 USC § 102/103

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for a patent.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims **1 and 3-4** are rejected under 35 U.S.C. 102(a) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Pan et al.** ("Using Polypyrrole as the Contrast pH Detector to Fabricate a Whole Solid-State pH Sensing Device", *IEEE Sensors Journal*, Vol. 3, No. 2, April 2003, pp. 164-170).

Pan teaches a process for fabricating a whole solid-state pH sensing device by using polypyrrole as the contrast pH detector, said process comprising following steps:

step 1: preparing various solid-state substrates and selecting an appropriate substrate based on the solid-state sensing material and the sensing environment (= ITO Glass);

step 2: depositing a solid-state sensing material on said substrate (= Deposition of SnO_2);

step 3: routing the device (= Conduction Line) [page 165, Fig. 1];

step 4: using an epoxy resin to seal the material and fixing the sensing window area (= Package with the Epoxy); and

step 5: then immersing the device into an electro-polymerizing solution (page 166, Fig. 4), and electro-polymerizing polypyrrole (= Polymerization of the Polypyrrole), thus completing the fabrication of the whole solid-state pH sensing

device (= Solid-State pH Sensor) [page 166, Fig. 5].

The step of electro-polymerizing polypyrrole comprises following steps:

step A: preparing said finished conductive substrate (= After fabrication of the SnO_2 thin film, the pH sensing electrode and reference electrode are complete) [page 165, "II. Experimental"];

step B: preparing said electro-polymerizing solution, which comprises a buffer solution (= phosphate buffer solution) and the monomer of polypyrrole (= pyrrole) [page 165, "II. Experimental"];

step D: connecting the substrate (= SnO_2) to the positive electrode of the power supply, and connecting a platinum electrode (= Pt) to the negative electrode of the power supply, and immerging the substrate into said electro-polymerizing solution (= Polymerization Solution) [page 166, Fig. 4], where the power supply provides a constant potential (= 4V) which is higher than the oxidizing potential (= overoxidation) of said polypyrrole, in a manner that said polypyrrole can be polymerized on said substrate (page 165, "II. Experimental"); and

step F: removing and drying said sensing device, thus completing the fabrication of the polypyrrole sensor (page 165, Fig. 1).

The solid-state substrate is selected from the group consisting of a silicon substrate, a glass substrate, a ceramic substrate or a plastic substrate (= glass) [page 165, Fig. 1].

The sensing material is selected from the group consisting of a tin dioxide membrane or other solid-state conductive ion-sensing membrane (= SnO_2) [page 165, Fig. 1].

The polymerizing solution of the polypyrrole comprises a buffer solution (= phosphate buffer solution) and polypyrrole (= pyrrole), such as the electro-polymerizing solution comprising a phosphate solution and polypyrrole (page 165, "II. Experimental"); wherein, through changing the composition of said polymerizing solution, the control of the sensitivity of said polypyrrole sensor can be achieved (*inherent*), and wherein this technology can be applied to fabricate the corresponding sensing electrode with an appropriate sensitivity and the control of the sensitivity of the differential pair pH sensing device can be obtained (*inherent*).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

I. Claims **2 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over **Pan et al.** ("Using Polypyrrole as the Contrast pH Detector to Fabricate a Whole Solid-State pH Sensing Device", *IEEE Sensors Journal*, Vol. 3, No. 2, April 2003, pp. 164-170) as applied to claims 1 and 3-4 above, and further in view of **Peacock et al.** (US

Patent No. 5,508,809) and **Gray et al.** (US Patent No. 3,929,609).

Pan is as applied above and incorporated herein.

The process of Pan differs from the instant invention because Pan does not disclose the following:

a. Wherein said electro-polymerizing solution comprises electrolytes, as recited in claim 2.

b. Wherein said polymerizing solution of the polypyrrole comprises salts, such as the electro-polymerizing solution comprising potassium chloride, as recited in claim 5.

Like Pan, Peacock teaches fabricating a sensing device. Peacock teaches that a film of polypyrrole was deposited by an electrochemical technique. A solution containing 0.1 molar concentration of pyrrole and 0.1 molar concentration of potassium chloride with a phosphate buffer was used as the electrolyte (col. 7, lines 15-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the electro-polymerizing solution described by Pan with wherein said electro-polymerizing solution comprises electrolytes; and wherein said polymerizing solution of the polypyrrole comprises salts, such as the electro-polymerizing solution comprising potassium chloride because a solution containing pyrrole, potassium chloride and a phosphate buffer is conventionally used as the electrolyte for electrodepositing a film of polypyrrole as taught by Peacock (col. 7, lines 15-28).

c. Step E: immersing the polypyrrole sensor into the de-ionized water to clean said polypyrrole sensor, as recited in claim 2.

Like Pan, Gray teaches using a sensing device. Gray teaches that the electrodes were pretreated by immersing in a dichromate-sulfuric acid cleaning solution for several seconds and rinsing three times with doubly distilled water prior to immersion in the test solution (col. 6, lines 25-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process described by Pan by immersing the polypyrrole sensor into the de-ionized water to clean said polypyrrole sensor because rinsing three times with doubly distilled water prior to immersion in a test solution is a conventional pretreatment of electrodes as taught by Gray (col. 6, lines 25-28).

II. Claims **1 and 3-4** are rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 2590004** ('004) in combination with **Zier et al.** (US Patent No. 4,919,141).

JP '004 teaches a process for fabricating a whole solid-state pH sensing device by using polypyrrole as the contrast pH detector, said process comprising following steps:

step 1: preparing various solid-state substrates and selecting an appropriate substrate **6** based on the solid-state sensing material and the sensing environment (= a silicon substrate);

step 2: depositing a solid-state sensing material (= an oxide film) on said

substrate **6**;

step 3: routing the device **1-1, 2-1** (= lead parts);

step 4: using an insulating film **5** to seal the material and fixing the sensing window area; and

step 5: then immersing the device into an electro-polymerizing solution (= an aqueous solution of glucose oxidase and pyrrole to effect an electrolytic polymerization), and electro-polymerizing polypyrrole **9** (= by which a polymerized pyrrole film containing glucose oxidase is deposited), thus completing the fabrication of the whole solid-state pH sensing device (abstracts; and Figs. 1-2).

The step of electro-polymerizing polypyrrole comprises following steps:

step A: preparing said finished conductive substrate (= before immersing the substrate in the aqueous solution of glucose oxidase and pyrrole);

step B: preparing said electro-polymerizing solution (= an aqueous solution of glucose oxidase and pyrrole), which comprises the monomer of polypyrrole (= pyrrole);

step D: connecting the substrate to the positive electrode of the power supply (= electrolytic polymerization) and immersing the substrate into said electro-polymerizing solution, where the power supply provides a constant potential in a manner that said polypyrrole can be polymerized on said substrate (= by which a polymerized pyrrole film **9** containing glucose oxidase is

deposited); and

step F: removing and drying said sensing device, thus completing the fabrication of the polypyrrole sensor (abstracts; and Figs. 1-2).

The solid-state substrate is selected from the group consisting of a silicon substrate, a glass substrate, a ceramic substrate or a plastic substrate (= a silicon substrate) [abstracts].

The sensing material is selected from the group consisting of a tin dioxide membrane or other solid-state conductive ion-sensing membrane (= an oxide film) [abstracts].

The polymerizing solution of the polypyrrole comprises polypyrrole (= pyrrole), such as the electro-polymerizing solution comprising polypyrrole (= pyrrole); wherein, through changing the composition of said polymerizing solution, the control of the sensitivity of said polypyrrole sensor can be achieved (*inherent*), and wherein this technology can be applied to fabricate the corresponding sensing electrode with an appropriate sensitivity and the control of the sensitivity of the differential pair pH sensing device can be obtained (*inherent*).

The method of JP '004 differs from the instant invention because JP '004 does not disclose wherein the insulating film comprises an epoxy resin, as recited in claim 1.

JP '004 teaches an insulating film **5** (abstracts; and Figs. 1-2).

Like JP '004, Zier teaches a sensing device. Zier teaches that the electrodes are embedded in an insulating epoxy resin filler **12** (col. 6, lines 61-66; and Figs. 1-3).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the insulating film described by JP '004 with wherein the insulating film comprises an epoxy resin because embedding electrodes in an insulating epoxy resin filler is a conventional construction of a sensing device as taught by Zier (col. 6, lines 61-66; and Figs. 1-3).

Furthermore, one having ordinary skill in the art would have known to isolate the electrodes from each other otherwise they would short circuit.

III. Claims **2 and 5** are rejected under 35 U.S.C. 103(a) as being unpatentable over **JP 2590004** ('004) in combination with **Zier et al.** (US Patent No. 4,919,141) as applied to claims 1 and 3-4 above, and further in view of **Koopal et al.** (US Patent No. 5,422,246) and **Gray et al.** (US Patent No. 3,929,609).

JP '004 is as applied above and incorporated herein.

The process of JP '004 differs from the instant invention because JP '004 does not disclose the following:

a. Wherein in step B: said electro-polymerizing solution comprises a buffer solution and electrolytes, as recited in claim 2.

b. Wherein said polymerizing solution of the polypyrrole comprises a buffer solution and salts, such as the electro-polymerizing solution comprising a phosphate

solution and potassium chloride, as recited in claim 5.

JP '004 teaches an aqueous solution of glucose oxidase and pyrrole to effect an electrolytic polymerization (abstract).

Like JP '004, Koopal teaches fabricating a sensing device. Koopal teaches that an aqueous solution containing 0.9% potassium chloride and 10 mM phosphate (PBS), together with 0.3 M pyrrole was used in the polymerization reaction (col. 12, lines 58-61).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process described by JP '004 with wherein said electro-polymerizing solution comprises a buffer solution and electrolytes; and wherein said polymerizing solution of the polypyrrole comprises a buffer solution and salts, such as the electro-polymerizing solution comprising a phosphate solution and potassium chloride because a solution containing pyrrole, potassium chloride and a phosphate buffer is conventionally used as the electrolyte for electrodepositing a film of polypyrrole as taught by Koopal (col. 12, lines 58-61).

c. Wherein in step D: connecting a platinum electrode to the negative electrode of the power supply, and where the power supply provides a constant potential which is higher than the oxidizing potential of said polypyrrole, as recited in claim 2.

Koopal teaches that a platinum plate acted as a counter electrode in the

polymerization reaction (col. 12, lines 66-67).

As to where the power supply provides a constant potential which is higher than the oxidizing potential of said polypyrrole, it is held that changes in potential is not a patentable modification; however, such changes may impart patentability to a process if the ranges claimed produce new and unexpected results which are different in kind and not merely in degree from results of the prior art, such ranges are termed "critical" ranges and Applicant has the burden of proving such criticality; even though Applicant's modification results in great improvement and utility over the prior art, it may still not be patentable if the modification was within capabilities of one skilled in the art; more particularly, where general conditions of the claim are disclosed in the prior art, it is not inventive to discover optimum or workable ranges by routine experimentation. *In re Aller*, 220 F2d 454, 456, 105 USPQ 233, 235 (CCPA 1955) and MPEP § 2144.05.

d. Wherein in step E: immersing the polypyrrole sensor into the de-ionized water to clean said polypyrrole sensor, as recited in claim 2.

Like JP '004, Gray teaches using a sensing device. Gray teaches that the electrodes were pretreated by immersing in a dichromate-sulfuric acid cleaning solution for several seconds and rinsing three times with doubly distilled water prior to immersion in the test solution (col. 6, lines 25-28).

It would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified the process described by JP '004 by immersing

the polypyrrole sensor into the de-ionized water to clean said polypyrrole sensor because rinsing three times with doubly distilled water prior to immersion in a test solution is a conventional pretreatment of electrodes as taught by Gray (col. 6, lines 25-28).

Citations

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Tatsuma et al. ("Peroxidase-Incorporated Polypyrrole Membrane Electrodes", *Anal. Chem.* (1992), Vol. 64, pp. 1183-1187) is cited to teach electropolymerizing pyrrole onto a SnO_2 electrode.

Nishizawa et al. ("Penicillin Sensor Based on a Microarray Electrode Coated with pH-Responsive Polypyrrole", *Anal. Chem.* (1992), Vol. 64, pp. 2642-2644) is cited to teach electropolymerizing pyrrole onto interdigitated Pt arrays in a glass substrate.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Edna Wong whose telephone number is (571) 272-1349. The examiner can normally be reached on Mon-Fri 7:30 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Edna Wong
Primary Examiner
Art Unit 1753

EW
June 26, 2007